A Comparative study of physicochemical properties of *gariss* from two production sites under two management systems

A.I, Ahmed[1]; B.E., Mohamed[2]; N.M.E, Yousif2; B Faye[3] and G., loiseau3

[1]Department of Biochemistry and Food Science, Faculty of Natural Resources and Environmental Studies, University of Kordofan, Elobeid, Sudan, P.O. Box .160.

2Department of Food Science and Technology, Faculty of Agriculture, University of Khartoum.

[3]CIRAD, Montpellier, France.

adamalgnana62@yahoo.com

Abstract

The objectives of present study were to elucidate the differences between physicochemical properties of gariss samples procured from two different production sites in two different management systems (i.e. traditional system Kordofan site and semi-intensive system Khartoum site). The effect of the season in which gariss samples collected was studied. Gariss samples from two production sites investigated were collected in the different season, namely summer, autumn and winter. Means of the physicochemical properties of gariss collected in autumn (Kordofan), summer (Khartoum), and winter (Khartoum and Kordofan) were determined, and then the age of gariss was documented when the samples were collected. The period of camel milk fermentation is the age of gariss which was reported by the persons responsible for gariss production. Four different ages of gariss were registered (5-8hrs, 12hrs, 48hrs and more than 48hrs). Each fermentation time (age of gariss) was analysed for the physicochemical properties. Gariss prepared from different locations and in different seasons in Kordofan and Khartoum production sites were significantly ($P \leq 0.05$) different in most of the physicochemical properties examined. This could be explained by the fact that camels may depend on different nutritional sources or different physiological status that may affect their milk and consequently gariss, also various age of gariss had various trends in physicochemical properties investigated.

Key words: *Physicochemical properties , gariss ,age*